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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/580,793	05/30/2000	Jeffry Jovan Philyaw	PHLY-25091	8388
25883	7590	12/09/2003	EXAMINER	
HOWISON & ARNOTT, L.L.P. P.O. BOX 741715 DALLAS, TX 75374-1715			LE, UYEN CHAU N	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 12/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/580,793		<b>Applicant(s)</b> PHILYAW ET AL.	
	<b>Examiner</b> Uyen-Chau N. Le		<b>Art Unit</b> 2876	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on 23 October 2000.

2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 1-37 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 1-37 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
       Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
       Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
       a) ☐ All    b) ☐ Some \* c) ☐ None of:  
           1. ☐ Certified copies of the priority documents have been received.  
           2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
           3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
       a) ☐ The translation of the foreign language provisional application has been received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>103000</u> .	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

***Prelim. Amdt/Amendment***

1. Receipt is acknowledged of the Preliminary Amendment filed 23 October 2000.

***Claim Objections***

2. Claims 2-3, 5-6 and 13-16 are objected to because of the following informalities:  
  
Re claim 2, line 2: Substitute "the range" with -- a range --.  
  
Re claim 3, line 2: Substitute "the range" with -- a range --.  
  
Re claim 5, line 2: Substitute "the range" with -- a range --.  
  
Re claim 6, line 2: Substitute "the range" with -- a range --.  
  
Re claim 13, line 1: Substitute "the sub-elements" with -- the first and second sub-elements --.  
  
Re claim 14, line 1: Substitute "the sub-elements" with -- the first and second sub-elements --.  
  
Re claim 15, line 1: Substitute "the reading" with -- a reading --.  
  
Re claim 15, line 9: Substitute "the users" with -- users --.  
  
Re claim 16, line 2: Substitute "the operating" with -- operating --.  
  
Re claim 16, line 3: Substitute "a manual optical reader" with -- the manual optical reader --.  
  
Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-7, 19, 26-27 and 30-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Rogers (US 4,714,934).

Re claims 1-7, 19, 26-27 and 30-31: Rogers discloses an aiming indicia for a barcode comprising a sequence of parallel code bars [50, 52] and intervening code spaces disposed along a longitudinal code axis in accordance with a predefined standard (fig. 8) comprising a non-encoded graphic element [ABC] disposed on the longitudinal code axis adjacent the barcode and spaced apart from the nearest code bars by a distance of at least 10 times a minimum unit with for the code bars (fig. 8); wherein the graphic element 805 has a height, measured in a direction perpendicular to the longitudinal code axis, within a range from 50-105%, 85-100%, 95% of the height of the barcode (fig. 8); wherein the graphic element is separated from the nearest portion of the barcode by a distance, measured in a direction parallel to the longitudinal code axis, within the range from about 15-30%, 18-24%, 20% the height of the element (fig. 8); a human-readable element disposed proximate to the character string and parallel to the longitudinal code axis (fig. 8).

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was

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commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 8-14 and 32-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers. The teachings of Rogers have been discussed above.

Re claims 8-14 and 32-37, Rogers discloses that the graphic element comprising a letter C but fails to teach or fairly suggest that the graphic element is at least partially rendered in a red color/color contrasting with the color of the code bars (e.g., black); that the graphic element comprises a plurality of discrete non-encoded sub-elements wherein a first element is a colon and a second element is a letter C having interior rendered in a red color and an outline portion rendered in a black color.

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to modify the letter C as taught by Rogers in an outline format and print it in color (e.g., red or color that is contrasting with the color of the code bars) for aesthetic purposes. Furthermore, such modification would have been merely a substitution of equivalents well within the ordinary skill in the art, and therefore an obvious expedient.

8. Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers in view of Smith (US 4,528,443). The teachings of Rogers have been discussed above.

Re claims 15-18, Rogers have been discussed above but fail to teach or fairly suggest a method for facilitating a reading of a barcode using manual optical reader comprising a step of inducing users of optical readers to first direct the optical axis of the optical reader such that the target region is

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centered on the aiming indicia and then to direct the optical axis of the optical reader such that the target region sweeps along the longitudinal code axis from the aiming indicia across the barcode.

Smith teaches a handheld barcode reader 7 is moved in the direction 8 by a user with the lower end of the wand 7 adjacent to a barcode label 3 (fig. 2A; col. 4, lines 40+).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the reading method as taught by Smith into the barcode system of Rogers for a better data processing (i.e., scanning the barcode in an optical axis direction to provide an accurate result). According, such modification would have been an obvious engineering variation, well within the ordinary skill in the art, and therefore an obvious expedient.

9. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers in view of Krummel (US 5,557,091). The teachings of Rogers have been discussed above.

Re claims 20-21, Rogers have been discussed above but fail to teach or fairly suggest that a bar/space pattern associated with the character string comprising in sequential order: start character, message character, check character, and stop character.

Krummel teaches a barcode having character string comprises a start character 39a, data character, check character 39c; stop character 39b (fig. 5; col. 4, lines 26-39).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Krummel into the teachings of Rogers in order to provide Roger with a more accurate system wherein the encoded data can be detected readily and accurately within a barcode imaging system. Furthermore, such modification would have been an obvious engineering variation, well within the ordinary skill in the art, and therefore an obvious expedient.

10. Claims 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers in view of Mak (US 5,420,943). The teachings of Rogers have been discussed above.

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Re claims 22-23, Roger discloses the bar axis forms a slant angle with a line perpendicular to the longitudinal code axis (fig. 2), but fails to teach or fairly suggest the slant angle having a value greater than 1 degree or about 5-45 degrees.

Mak teaches a bar [34a-34c] forms a slant angle with a line ( $\Delta p$ ) perpendicular to the longitudinal code axis ( $\Delta d$ ) slant angle of 45 degrees (fig. 3; col. 7, lines 40+).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Mak into the teachings of Rogers in order to provide Rogers with a capability of guiding the array across the line of text, which then processed for character recognition, and thus providing a more versatile system wherein the array can be used in two-dimensional mode to provide a bit map of handwriting, can be used to read barcodes or can be used as a mouse to simulate an ASCII keyboard to input ASCII codes corresponding to the alphanumeric characters.

11. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers in view of Otten (US 3,959,631). The teachings of Rogers have been discussed above.

Re claims 24-25, Rogers have been discussed above but fail to teach or fairly suggest that a pair of wedge symbols wherein each wedge symbol being a right triangle.

Otten teaches a pair of wedge symbols [12, 14] (fig. 1; col. 3, lines 1-27).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate a pair of wedge symbols as taught by Otten into the teachings of Rogers for a better data processing, which is dynamic in operation (i.e., continuous reading to provide an accurate result). Furthermore, such modification would have been an obvious extension as taught by Rogers for aesthetic purpose, and therefore an obvious expedient.

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***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patents to are cited as of interest and illustrate a similar structure to an apparatus and system of Rogers (US 5,258,774); Reber et al (US 5,995,105); Uddgren (US 4,396,303); Kodron (US 4,516,016); Mullins et al (US 6,352,205); Kerfoot Jr. (US 5,390,796); Price et al (US 4,939,674); Watanabe et al (US 6,095,419) aiming indicia for a barcode and method of use.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uyen-Chau N. Le whose telephone number is 703-306-5588. The examiner can normally be reached on SUN, M, W, F 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL G LEE can be reached on (703) 305-3503. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

*Uyen-Chau N. Le*  
November 29, 2003



MICHAEL G. LEE  
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